The final payment of the remaining ¼ shall be made upon completion of the work.

Testing facilities, bituminous liquids and Portland cement, will not be paid for directly but all costs will be considered incidental to the various contract items.

Payment will be made under:

Pay Item		Pay Unit
639.18	Field Office, Type A	Each
639.19	Field Office, Type B	Each
639.21	Testing Facilities - Soils	Lump Sum

### **SECTION 640 - VACANT**

### **SECTION 641 - REST AREA FACILITIES**

## Reserved

# **SECTION 642 - STEPS**

<u>642.01 Description</u> This work shall consist of the construction of wooden steps, precast concrete steps or cast-in-place concrete steps in accordance with these specifications and in reasonably close conformity with dimensions and designs shown on the plans.

<u>642.02 Materials</u> Materials for the steps shall meet the requirements as specified in the following Sections of Division 700 - Materials:

Exterior Ready Mixed Paint	708.01
Timber Preservative	708.05
Precast Concrete Units	712.06

Wood shall be well-seasoned spruce or pine, Number 1 dimension lumber. Nails and

hardware shall be galvanized.

Precast concrete steps shall conform to the specifications of precast units except as modified herein and shall be of the dimensions detailed on the plans or as otherwise approved. Exposed surfaces shall have a rubbed finish as specified in Section 502.14-d-2.

Cast-in-place concrete steps, shall conform to the requirements of Section 502 - Structural Concrete, Class A.

<u>642.03 Wooden Steps</u> Wooden steps shall be fabricated and fastened in accordance with standard commercial building practices.

After members have been cut to size, the ends shall be soaked in an approved timber preservative. Before assembling the steps, all contact surfaces shall be painted 2 coats of paint, color to be designated. The first coat of paint shall be thinned.

- <u>642.04 Precast Concrete Steps</u> Precast concrete steps shall be placed on a compacted gravel bed with horizontal joints level and vertical joints plumb. The foundation shall be prepared in advance of setting the steps by grading and compacting the aggregate subbase to the proper elevation. The steps shall be set with a uniform tread width to match the finish grade of the slope. All remaining excavated areas surrounding the steps shall be filled to the required grade with approved materials and thoroughly tamped.
- <u>642.05 Cast-in-place Concrete Steps</u> Cast-in-place concrete steps shall conform to the applicable requirements of Section 502 Structural Concrete.
- <u>642.06 Method of Measurement</u> Wooden steps and precast portland cement concrete steps will be measured by each unit, complete in place and accepted.

Cast-in-place concrete steps will be measured for payment by the cubic meter [cubic yard] in place.

642.07 Basis of Payment The accepted wooden steps will be paid for at the contract unit price each, complete and accepted in place which price shall be full compensation for furnishing all materials, labor and other incidentals necessary to complete the work.

The accepted quantity of precast concrete steps will be paid for at the contract unit price each, complete in place, which price shall be full compensation for furnishing and placing all materials including reinforcing steel.

Excavation and backfill will be measured and paid for as provided in Section 206 - Structural Excavation.

The accepted quantity for cast-in-place concrete steps will be paid for at the unit contract price per cubic meter [cubic yard] complete in place which price shall be full compensation for furnishing and placing all materials including reinforcing steel.

Payment will be made under:

Pay Item		Pay Unit
642.12	Wooden Steps	Each
642.15	Precast Concrete Steps	Each
642.17	Cast-in-place Concrete Steps	cubic meter [Cubic Yard]

## **SECTION 643 - TRAFFIC SIGNALS**

<u>643.01 Description</u> This work shall consist of furnishing and installing all equipment necessary for the erection and operation of a traffic signal, flashing beacon, temporary traffic signal or modification of a traffic signal, all in reasonably close conformity with the plans.

643.02 General All equipment shall be new unless otherwise specified. Requests for substitution of any specified material shall be submitted in writing with all documentation (specifications, mill certifications, etc.) in order to enable the Department to evaluate the proposal. Substitutes for specified material may be accepted upon approval by the Fabrication Engineer. Functionally, any substitute shall give equal or better service than the specified material. Existing signal equipment to be used shall be cleaned, repainted, and reconditioned as noted on the plans. All equipment, installation of equipment and other incidental work shall conform to the latest applicable provisions of: NEC, MUTCD, NESC, NEMA, and the ITE Standards for traffic control equipment. All work shall be done to the satisfaction of the Resident. The meaning of specific terms shall be as